

**DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare that:

COPY

My residence, post office and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter claimed and for which a patent is sought on the **DISPLACING EDGE SEGMENTS ON A FABRICATION LAYOUT BASED ON PROXIMITY EFFECTS MODEL AMPLITUDES FOR CORRECTING PROXIMITY EFFECTS**, the specification of which

☒ is attached hereto.

☐ was filed on \_\_\_\_\_ as Application Serial No. \_\_\_\_\_ and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is known to me to be material to patentability in accordance with Title 37, Code of Federal Regulations, Section 1.56.

I hereby claim foreign priority benefits under Title 35, United States Code, Section 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application-for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

**Prior Foreign Applications(s):**

Number

Country

Day/Month/Year filed

**Priority Claimed**

☐  
☐

I hereby claim the benefit under 35 USC §119(e) of any United States provisional application(s) listed below.

**Prior Provisional Application(s):**

Filing Date:

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

**Prior U.S. Application(s):**

Serial No.

Filing Date

Status: Patented, Pending, Abandoned

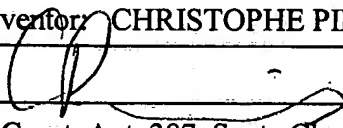
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) and/or agent(s): Edward A. Becker, Reg. No. 37,777; Marcel K. Bingham, Reg. No. 42,327; Carl L. Brandt, Reg. No. 44,555; Brian D. Hickman, Reg. No. 35,894; Craig G. Holmes, Reg. No. 44,770; Christopher J. Palermo, Reg. No. 42,056; Carina M. Tan, Reg. No. 45,769; and Bobby K. Truong, Reg. No. 37,499, all of

HICKMAN PALERMO TRUONG & BECKER LLP  
1600 Willow Street  
San Jose, CA 95125-5106

with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and all future correspondence should be addressed to them.

Full name of sole or first inventor: CHRISTOPHE PIERRAT

Inventor's signature: 

Date: 11/28/00

Residence: 420 Riverside Court, Apt. 307, Santa Clara, CA 95054

Citizenship: France

Post Office Address: 420 Riverside Court, Apt. 307, Santa Cruz, CA 95054

Full name of second inventor: YOUNG ZHANG

Inventor's signature: 

Date: Nov 28, 2000

Residence: 37151 Magnolia Street, Newark, CA 94560

Citizenship: Republic of China

Post Office Address:

50273-  
0017



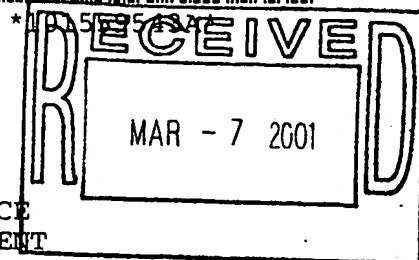
BDH/CF  
**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**  
ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

MARCH 02, 2001

PTAS  
HICKMAN PALERMO TRUONG & BECKER, LLP  
BRIAN D. HICKMAN  
1600 WILLOW STREET  
SAN JOSE, CALIFORNIA 95125-5106



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UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/01/2000

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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
PIERRAT, CHRISTOPHE

DOC DATE: 11/28/2000

ASSIGNOR:  
ZHANG, YOUPIING

DOC DATE: 11/28/2000

ASSIGNEE:  
NUMERICAL TECHNOLOGIES, INC.  
70 WEST PLUMERIA DRIVE  
SAN JOSE, CALIFORNIA 95134

SERIAL NUMBER: 09728885  
PATENT NUMBER:

FILING DATE: 12/01/2000  
ISSUE DATE:

PEARLENE FOSTER, PARALEGAL  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

DOCKETED

DATES:

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12-22-2000

FORM PTO-1596

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1-31-92

Patent and Trademark Office

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AGENTS ONLY

Docket No.: 50275-0017

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereto:

1. Name of Conveying Party(ies):

CHRISTOPHE PIERRAT

YOUPIING ZHANG

Additional name(s) of conveying party(ies) attached? ☐ Yes

3. Nature of Conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other

Execution Date: November 28, 2000

2. Name and address of receiving party(ies):

Name: Numerical Technologies, Inc.

Internal Address:

Street Address: 70 West Plumeria Drive

City: San Jose State/Country CA ZIP: 95134

Additional name(s) & address(es) attached? ☐ Yes

4. Application number(s) or patent number(s):

If the document is being filed together with a new application, the execution date of the application is: November 28, 2000

A. Patent Application No(s).

B. Patent No(s).

09/728885

Additional numbers attached? ☐ Yes

5. Name and address of party to whom correspondence concerning Document should be mailed:

Name: HICKMAN PALERMO TRUONG &amp; BECKER, LLP

Internal Address:

Street Address: 1600 Willow Street

City: San Jose State: CA Zip: 95125-5106

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41)

\$40.00

☒ Enclosed☐ Authorized to be charged to deposit account

8. Deposit account number:

50-1302

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9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Brian D. Hickman, Registration No. 35,894

December 1, 2000

Name and Registration No. of Person Signing

Signature

Date

Total number of pages comprising cover sheet: 4

CMB No. 0851-0011 (exp. 4/94)

12/07/2000 MAHME1 00000053 09728885

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ASSIGNMENT

WHEREAS WE, CHRISTOPHE PIERRAT, of Santa Clara, California, and YOUPING ZHANG, of Newark, California, have made a certain new and useful invention as set forth in an application for United States Letters Patent, entitled **DISPLACING EDGE SEGMENTS ON A FABRICATION LAYOUT BASED ON PROXIMITY EFFECTS MODEL AMPLITUDES FOR CORRECTING PROXIMITY EFFECTS**, executed by us on the date of execution of this document, as shown below, and filed concurrently herewith;

AND WHEREAS, NUMERICAL TECHNOLOGIES, INC., a corporation of the State of California and having an address of 70 West Plumeria Drive, San Jose, CA 95134-2134 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any and all Letters Patent of the United States and foreign countries which may be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt for and sufficiency of which is hereby acknowledged, I do hereby sell, assign, transfer and set over unto Numerical Technologies, Inc., its legal representatives, successors; and assigns ("Assignee"), the entire right, title and interest in and to said invention as set forth in the above-mentioned application, including any continuations, continuations-in-part, divisions, reissues, re-examinations or extensions thereof, and in and to any and all patents of the United States and foreign countries which may be issued for said invention;

UPON SAID CONSIDERATIONS, I hereby agree with the said Assignee that I will not execute any writing or do any act whatsoever conflicting with these presents, and that I will, at any time upon request, without further or additional consideration but at the expense of said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining original, divisional, continuations, continuations-in-part, reexamined, reissued, or extended Letters Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, by giving testimony in any proceedings or transactions involving such applications or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of the assigns and legal representatives of assignor and Assignee;

AND I request the Commissioner of Patents and Trademarks to issue any Letters Patent of the United States which may be issued for said invention to said Assignee, its legal representatives, successors or assigns, as the sole owner of the entire right, title and interest in and to said patent and the invention covered thereby.

Date

11/28/00

CHRISTOPHE PIERRAT

STATE OF CALIFORNIA )

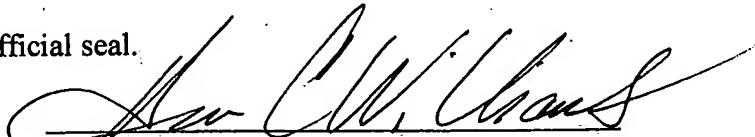
) SS:

COUNTY OF SANTA CLARA )

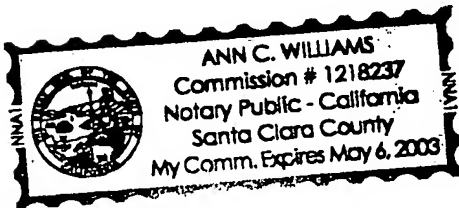
On this 28<sup>th</sup> day of NOVEMBER, 2000, before me personally appeared **Christophe Pierrat**, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

SEAL

  
Notary Public

My commission expires 5-6-03



Nov 28, 2000  
Date

*Yuping Zhang*  
YOUPIING ZHANG

STATE OF CALIFORNIA )  
 ) SS:  
COUNTY OF SANTA CLARA )

On this 28<sup>th</sup> day of NOVEMBER, 2000, before me personally appeared **Yuping Zhang**, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

S E A L

*Ann C. Williams*  
Notary Public

My commission expires 5-6-03

